

ABSTRACT OF THE DISCLOSURE

A semiconductor device has a capacitor including a storage node as a pair of electrodes isolated from each other by a capacitor dielectric layer and a cell plate, and includes a first contact and interlayer insulation layers 5 formed on the first contact and having holes reaching the first contact. Hole and holes have diameters different from each other, and the diameters discontinuously change on a boundary between hole and holes. Further, the storage node is formed along inner wall surfaces of holes and is electrically connected to the first contact. With this, in the semiconductor 10 device having a capacitor, a capacitor capacity can increase while stably ensuring an electrical connection of a capacitor lower electrode.